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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/532,588

07/15/2005

Stuart Charles Wray

038665.56184US

4791

23911 7590 10/27/2010  
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EXAMINER

THOMPSON, JR, OTIS L

ART UNIT

PAPER NUMBER

2477

MAIL DATE

DELIVERY MODE

10/27/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/532,588	<b>Applicant(s)</b> WRAY ET AL.	
	<b>Examiner</b> OTIS L. THOMPSON, JR	<b>Art Unit</b> 2477	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,6-8,32,33 and 37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,6-8,32,33 and 37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

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***Response to Arguments***

1. Applicant's arguments with respect to claims 1-3, 6-8, 32, 33, and 37 have been considered but are moot in view of the new ground(s) of rejection.

***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 7, 2010 has been entered.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. 1-3, 6-8, 32, 33, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Odom et al. (Cisco VoIP Call Admission Control) in view of Valavi et al. (US 2004/0078460 A1).

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5. **Regarding claim 1**, Odom et al. discloses *a method of call admission control for a continuous stream of data in packet switched networks including at least two local area networks communication to one another across a connecting network, the method comprising the steps of:*

a. *Transmitting a burst of trial data from a first node in the first local area network through the connecting network to a second node in the second local area network*

(Odom, Page 19, SAA Protocol; The SAA protocol sends a probe [i.e. burst of trial data; Page 23, SAA Probe Format, see "...each probe consists of multiple packets..."] from the SAA client on the gateway device in the first LAN [Odom, Figure 4] to the server gateway in the other network [Odom, Page 19, SAA Protocol].);

b. *Reflecting the burst of trial data received at the second node back to the first node* (Odom, Page 19, SAA Protocol, see "...returns probe to the sender...");

c. *Receiving the reflected burst of trial data at the first node through the connecting network* (Odom, Page 19, SAA Protocol, see "...returns the probe to the sender...", i.e. receiving the reflected burst is inherent);

d. *At the first node, comparing the reflected burst of trial data to the transmitted burst of trial data to determine whether transmission of the continuous stream of data can be initiated from said first node to said second node* (Odom, Page 19, SAA Protocol, Calculating Planned Impairment Value; It is noted that in order to determine packet loss in a ping style test [Odom, Page 18, SAA Probes Versus Pings], the reflected burst of trial data must be analyzed and compared to the data sent to determine if a portion of the burst was lost [i.e. if packet loss occurred]).

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Odom et al. discloses the claimed invention above but fails to specifically disclose that *the burst of trial data is transmitted at a higher data rate than the packets to be transmitted on initiation of the continuous stream of data*. However, Valavi et al. discloses a network connection setup procedure which provides admission control. A sending device (sender) that wants to initiate a transmission first probes whether there is sufficient bandwidth at a target priority level for the transmission (Paragraph 0007). Instead of starting its transmission directly at the desired transmission rate and target priority level, the sender begins in a probing mode in which it sends packet a priority level that is lower than the target priority level and at a transmission rate up to a maximum target transmission rate, which may be the same or slightly higher than the target transmission rate (Paragraph 0007) (i.e. *burst of trial data [probe] is transmitted at a higher data rate than the packets to be transmitted on initiation of the continuous stream of data*). While in probing mode, the sender receives feedback from the receiver as to whether the network can support the transmission at the current transmission rate and priority level. The sender further makes the final determination of transmission rate and priority level for the data packets (i.e. *continuous stream*) (Paragraph 0007). By confirming that there is sufficient bandwidth even at a lower priority level, the sender ensures that there is sufficient bandwidth at the target priority level, and enters traffic only when that condition is met (Paragraph 0007).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to incorporate the teachings of Valavi et al. into Odom et al. in order to ensure sufficient bandwidth at a target priority level for the transmission of the continuous stream of data.

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6. **Regarding claim 2**, Odom et al. in view of Valavi et al. inherently discloses *selecting a path through the connecting network, the path being determined by the connecting network*

because in Odom et al., according to the SAA Protocol on page 19, SAA probes used for CAC go out randomly on ports in the top end of the audio UDP-defined port range. The path is thus inherently determined by the connecting network and not predefined.

7. **Regarding claim 3**, Odom et al. in view of Valavi et al. discloses that *the burst of trial data is the same size as the packets to be transmitted in the continuous stream of data* (Odom et al., Page 18, SAA Probes Versus Pings, see “...SAA packets can be built and customized to mimic the type of traffic for which they are measuring the network-in this case a voice packet...”; Page 19, SAA Protocol, see “...SAA probes...go out randomly...; they use a packet size based on the codec the call will use...”).

8. **Regarding claim 6**, Odom et al. in view of Valavi et al. discloses *comparing the number of packets in the transmitted burst of trial data and the reflected burst of trial data, and calculating an estimate of packet loss rate* (Odom et al., Page 18, The Cisco Service Assurance Agent, see “...capabilities to measure network delay and packet loss are useful...reasonable to assume that the packet delay and loss values that the probe returns...”; Page 19, Calculated Planning Impairment Factor, see “...calculation based on network delay and packet loss figures...”).

9. **Regarding claim 7**, Odom et al. in view of Valavi et al. discloses *transmitting multiple bursts of trial data to improve the estimate* (Odom et al., Page 23 under Figure 10, see “...periodic probe...will be sent to that destination to refresh the information...dynamically adjusts the probe traffic...”).

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10. **Regarding claim 8**, Odom et al. in view of Valavi et al. discloses *deciding to transmit packet data based on an acceptable packet loss rate for the transmission of the continuous stream of data* (Odom et al., Page 18, Measurement Based CAC Mechanisms, see “...SAA probes...measure the loss and delay...These values...to use in making a decision on the condition...ability to carry a voice call...”; Page 19, Calculated Planning Impairment Factor, see “...probe delay and loss information is used in calculating an ICPIF value that is then used as a threshold for CAC decisions...”).

11. **Regarding claims 32 and 33**, Odom et al. in view of Valavi et al. discloses *wherein said first node comprises a telephone and wherein said second node comprises a telephone* (Odom et al., Page 1 1<sup>st</sup> paragraph, see “...(CAC) is a concept that applies to voice traffic only...”, i.e. This implies that the first and second nodes are telephones; Also see figure 8).

12. **Regarding claim 37**, Odom et al. in view of Valavi et al. discloses *wherein the packet loss rate is not acceptable and the method includes not initiating the transmission of the continuous stream of data* (Odom et al., Page 18, Measurement Based CAC Mechanisms, see “...SAA probes...measure the loss and delay...These values...to use in making a decision on the condition...ability to carry a voice call...”; Page 19, Calculated Planning Impairment Factor, see “...probe delay and loss information is used in calculating an ICPIF value that is then used as a threshold for CAC decisions...”).

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OTIS L. THOMPSON, JR whose telephone number is (571)270-1953. The examiner can normally be reached on Monday to Thursday 7:30 am to 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chirag Shah can be reached on (571)272-3144. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Otis L Thompson, Jr./  
Examiner, Art Unit 2477

October 13, 2010

/Chirag G Shah/

Supervisory Patent Examiner, Art Unit 2477